



Swallow STRONG Program Reduces Hospital Admissions

A federally funded study published in the 2016 Journal of the American Geriatrics Society¹ demonstrated the clinical efficacy as well as the positive economic impact of lingual strengthening using the Swallow Solutions device for the treatment of swallowing disorders (dysphagia).

KEY CLINICAL BENEFIT

61% decrease in hospital admissions

Methods:

- Patients enrolled: 56
- Mean age: 70 years
- Variety of medical diagnoses
- Completed 8-week regimen of oropharyngeal strengthening facilitated by the Swallow Solutions device

Results:

- Anterior and posterior lingual pressures increased ($P < 0.001$)
- Quality of Life improved on all subscales of a dysphagia-specific questionnaire, including eating desire, mental health and physical, with 8 of 11 being statistically significant ($P < 0.04$)
- Increased Functional Oral Intake Scale (FOIS) levels indicating movement toward a less restrictive diet ($P = 0.02$)
- Pneumonia diagnoses decreased 67% ($P = 0.10$)
- Hospital admissions decreased 61% ($P = 0.009$)

Hospital Admissions

Prior to Swallow STRONG Therapy



After Swallow STRONG Therapy



 = 5 Admissions

¹Rogus-Pulia N, Rusche N, Hind JA, et al. Effects of device-facilitated isometric progressive resistance oropharyngeal therapy on swallowing and health-related outcomes in older adults with dysphagia. *J Am Geriatr Soc.* 2016;64(2):417-424.



The Swallow STRONG multidisciplinary clinical demonstration program is the first to demonstrate substantial improvements in lingual muscular strength and overall health status in older adults with dysphagia who completed [device-assisted lingual strengthening] therapy.

» 2016 Journal of the American Geriatrics Society¹

KEY ECONOMIC BENEFIT

Reduction in hospitalization costs of **\$1.2 million** (\$21,285/patient enrolled)

In addition to the positive clinical outcomes, the study reported the substantial economic impact of using the Swallow Solutions device for the treatment of dysphagia.

Results:

- 61% decrease in hospital admissions (P=0.009)
- 56% decrease in hospital bed days (P=0.17)
- \$3,195.56 average bed day cost
- \$1.192M total reduction in hospitalization costs

Hospital Bed Days

Prior to Swallow STRONG Therapy



After Swallow STRONG Therapy



 = 50 Bed Days